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# INDEX SUMMARY

## NEW CHICAGO BUILDING CODE

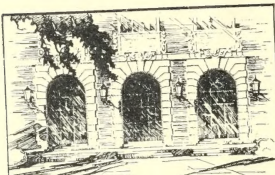
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INDEX SUMMARY *of the New*  
CHICAGO BUILDING CODE  
WITH COMPLETE CROSS REFERENCES

*Compiled by*

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DEPARTMENT OF BUILDINGS, CITY OF CHICAGO

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## FOREWORD

No member of the Department of Buildings of the City of Chicago, and no member of any other department of the City of Chicago has had any hand, directly or indirectly, in the compilation of this Index Summary. No part of this Index, therefore, can be considered in any sense as any official wording or interpretation of the Building Code. Such wording or interpretation as contained in the Index is solely the responsibility of the author. His experience as Plan Examiner, Department of Buildings, City of Chicago, since 1914, has fitted him to know the needs of architects, engineers, and builders, and it is believed, to satisfy those needs with the first adequate index of any Chicago Building Code.

Since it is inevitable that errors and ambiguities should creep into this tremendously detailed work, the author will appreciate any notice of such errors or discrepancies. It should be noticed, however, that many apparent errors are due to conflicts in the code itself and not to the Index.

This Index Summary does not include:—

The Electrical Code

The Fire Prevention Code

Chapter 83 Water Supply and Distribution Systems

Chapter 84 Steam Boilers and Unfired Pressure Vessels

Chapter 85 Mechanical Refrigeration

The Zoning Ordinance

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# INDEX

## TO THE

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This covers all general and miscellaneous items on buildings and structures of all kinds. It should be referred to first if the class of use or type of building is not known, or if it is uncertain in what chapter the item under consideration properly belongs.

#### OCCUPANCY CHAPTERS INDEX SUMMARIES:

These include complete detailed indexes of the individual chapters mentioned below. Each is a specialized index for a particular class or group of related occupancies and should be used for design purposes. Such chapters can be used as a "check list" to insure that all Code requirements of a specialized character are complied with.

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# GENERAL INDEX

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Hay	Shavings
Hemp	Sisal
Jute	Straw
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## Fire Prevention Department:—

Plan approval required as per Sec. 12-24 for:—

Business units, 1 or 2 stories, over 4,000 sq. ft.
Business units 3 stories or more
Churches
Garages, Class I
Hazardous use units
Institutional buildings
Multiple dwellings over 6 dwellings
Open air assembly units
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Schools
Theatres
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## Combined with 2 other interior stairs.....

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## Width: 3 ft. 8 in. in clear, min.....

## Windows, openings, etc., prohibited.....

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# INDEX SUMMARY

## CHAPTER 47

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INDEX SUMMARY  
CHAPTER 48  
MULTIPLE DWELLINGS



# INDEX SUMMARY

## CHAPTER 48

### MULTIPLE DWELLINGS

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CHAPTER 49  
INSTITUTIONAL BUILDINGS



REPORT OF THE SIXTH CENSUS OF THE POPULATION OF  
THE UNION OF SOUTH AFRICA, 5th MAY, 1936.

VOLUME IV.—LANGUAGES.

ERRATA.

Subsequent to the publication of Volume IV—Languages—of the report on the Census of 1936, certain errors resulting from confusion between "Official Language" and "Home Language" in the figures relating to the Asiatic Population were discovered. The particulars in the sub-joined tables should therefore be substituted for the figures appearing in Tables 16, 17, and 19.

TABLE 16.—OFFICIAL LANGUAGES SPOKEN —  
ASIATICS.

	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Both.....	86	40	79	39	165	92	818	326	734	284	1,532	305
English.....	172	53	437	174	969	505	2,369	1196	2,691	1015	5,693	1119
Afrikaans.....	111	26	117	27	228	126	447	178	441	171	888	175
Neither.....	6,438	73	6,789	73	13,257	73	13,678	5157	14,494	5621	28,172	5340
Unspecified.....	1,694	19	1,786	19	3,180	19	7,126	2843	7,423	2879	14,549	2861
TOTAL—Under 7 Years.....	8,801	100	9,208	100	18,009	100	23,068	100	25,786	100	50,851	100

UNION—UNIE.

Children  
Under School Age.

Both.....	86	40	79	39	165	92	818	326	734	284	1,532	305
English.....	172	53	437	174	969	505	2,369	1196	2,691	1015	5,693	1119
Afrikaans.....	111	26	117	27	228	126	447	178	441	171	888	175
Neither.....	6,438	73	6,789	73	13,257	73	13,678	5157	14,494	5621	28,172	5340
Unspecified.....	1,694	19	1,786	19	3,180	19	7,126	2843	7,423	2879	14,549	2861
TOTAL—Under 7 Years.....	8,801	100	9,208	100	18,009	100	23,068	100	25,786	100	50,851	100

Kinders Onder  
Skoolgaande Leeftyd.

Beide.....	86	40	79	39	165	92	818	326	734	284	1,532	305
Engels.....	172	53	437	174	969	505	2,369	1196	2,691	1015	5,693	1119
Afrikaans.....	111	26	117	27	228	126	447	178	441	171	888	175
Geen van Beide.....	6,438	73	6,789	73	13,257	73	13,678	5157	14,494	5621	28,172	5340
Ongepesitsoort.....	1,694	19	1,786	19	3,180	19	7,126	2843	7,423	2879	14,549	2861
TOTAAL—Onder 7 Jaar.....	8,801	100	9,208	100	18,009	100	23,068	100	25,786	100	50,851	100

NATAL.

Children  
Under School Age.

Both.....	33	40	34	39	67	39	151	71	121	55	272	63
English.....	460	53	425	485	885	518	2,595	1216	2,317	1050	4,912	1131
Afrikaans.....	6	29	6,702	76	13,052	76	13,011	6108	13,815	6260	26,856	6102
Neither.....	1,489	17	1,592	18	3,072	17	5,558	2603	5,814	2631	11,372	2619
Unspecified.....												
TOTAL—Under 7 Years.....	8,325	100	8,753	100	17,076	100	21,349	100	22,070	100	43,419	100

Kinders Onder  
Skoolgaande Leeftyd.

Beide.....	33	40	34	39	67	39	151	71	121	55	272	63
Engels.....	460	53	425	485	885	518	2,595	1216	2,317	1050	4,912	1131
Afrikaans.....	6	29	6,702	76	13,052	76	13,011	6108	13,815	6260	26,856	6102
Geen van Beide.....	1,489	17	1,592	18	3,072	17	5,558	2603	5,814	2631	11,372	2619
Ongepesitsoort.....												
TOTAAL—Onder 7 Jaar.....	8,325	100	8,753	100	17,076	100	21,349	100	22,070	100	43,419	100

VERSLAG OOR DIE SESDE SENSUS VAN DIE BEVOLKING  
VAN DIE UNIE VAN SUID-AFRIKA, 5 MEI 1936.

BOEKDEEL IV.—TALE.

ERRATA.

Na die publikasie van Boekdeel IV—Tale—van die verslag oor die Sensus van 1936 is seker foute as gevolg van verwarring tussen "Offisiële Taal" en "Huistaal" in die syfers ten opsigte van die Asiatische Bevolking ontdek. Die besonderhede in nevensgaande tabelle moet derhalwe die syfers vervang wat in Tabelle 16, 17, en 19 voorkom.

TABEL 16.—OFFISIËLE TALE WAT GEPRAAAT WORD—  
ASIATIE.

	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Beide.....	86	40	79	39	165	92	818	326	734	284	1,532	305
Engels.....	172	53	437	174	969	505	2,369	1196	2,691	1015	5,693	1119
Afrikaans.....	111	26	117	27	228	126	447	178	441	171	888	175
Geen van Beide.....	6,438	73	6,789	73	13,257	73	13,678	5157	14,494	5621	28,172	5340
Ongepesitsoort.....	1,694	19	1,786	19	3,180	19	7,126	2843	7,423	2879	14,549	2861
TOTAAL—Onder 7 Jaar.....	8,801	100	9,208	100	18,009	100	23,068	100	25,786	100	50,851	100

Kinders Onder  
Skoolgaande Leeftyd.

Beide.....	86	40	79	39	165	92	818	326	734	284	1,532	305
Engels.....	172	53	437	174	969	505	2,369	1196	2,691	1015	5,693	1119
Afrikaans.....	111	26	117	27	228	126	447	178	441	171	888	175
Geen van Beide.....	6,438	73	6,789	73	13,257	73	13,678	5157	14,494	5621	28,172	5340
Ongepesitsoort.....	1,694	19	1,786	19	3,180	19	7,126	2843	7,423	2879	14,549	2861
TOTAAL—Onder 7 Jaar.....	8,801	100	9,208	100	18,009	100	23,068	100	25,786	100	50,851	100

NATAL.

Children  
Under School Age.

Beide.....	33	40	34	39	67	39	151	71	121	55	272	63
Engels.....	460	53	425	485	885	518	2,595	1216	2,317	1050	4,912	1131
Afrikaans.....	6	29	6,702	76	13,052	76	13,011	6108	13,815	6260	26,856	6102
Neither.....	1,489	17	1,592	18	3,072	17	5,558	2603	5,814	2631	11,372	2619
Unspecified.....												
TOTAL—Under 7 Years.....	8,325	100	8,753	100	17,076	100	21,349	100	22,070	100	43,419	100

Kinders Onder  
Skoolgaande Leeftyd.

Beide.....	33	40	34	39	67	39	151	71	121	55	272	63
Engels.....	460	53	425	485	885	518	2,595	1216	2,317	1050	4,912	1131
Afrikaans.....	6	29	6,702	76	13,052	76	13,011	6108	13,815	6260	26,856	6102
Geen van Beide.....	1,489	17	1,592	18	3,072	17	5,558	2603	5,814	2631	11,372	2619
Ongepesitsoort.....												
TOTAAL—Onder 7 Jaar.....	8,325	100	8,753	100	17,076	100	21,349	100	22,070	100	43,419	100



TABLE 19.—HOME LANGUAGES SPOKEN—ASIATICS.

TABEL 19.—HUISTALE WAT GEPRAAAT WORD -ASIATE.

PAGE—BLADSY 166.

Sex.	HOME LANGUAGES—HUISTALE.													Geslag.
	Tamil.	Hindl.	Telegu.	Gujarati.	Urdu.	Other Indian.	Chinese.	Japanese.	European Languages.	Other.	Uns.	Under 21.	21 +	
						Andar Indiese.	Sjinese.	Japanees.	Europees Tale.	Andar.	Onges.	Onder 21.	Totaal.	Totaal.
UNION—UNIE.														
Urban.....	M. 27,190	18,838	8,008	12,882	6,879	1,422	1,701	130	2,259	107	276	43,144	36,548	79,692
	F. 24,631	16,371	7,100	8,371	5,292	1,012	901	119	1,875	63	207	41,039	24,863	65,902
	P. 51,821	35,209	15,108	21,253	12,171	2,434	2,602	149	4,134	170	483	84,183	61,411	145,594
Rural.....	M. 16,380	12,958	5,091	2,576	1,032	1,045	57	1	237	24	63	22,507	16,952	39,459
	F. 14,487	11,603	4,539	1,885	964	918	21	—	176	15	40	22,453	12,185	34,638
	P. 30,867	24,566	9,630	4,461	1,996	1,963	78	1	413	39	103	44,960	29,137	74,097
TOTAL.....	M. 43,570	31,791	13,099	15,458	7,911	2,467	1,758	131	2,496	131	339	65,651	53,500	119,151
	F. 39,118	27,974	11,639	10,256	6,246	1,930	922	18	2,051	78	247	63,492	37,048	100,540
	P. 82,688	59,765	24,738	25,714	14,157	4,397	2,740	150	4,547	209	586	129,143	90,548	219,691
CAPE—KAAP.														
Urban.....	M. 1,168	730	52	1,128	1,019	312	670	17	1,224	26	138	2,446	4,028	6,474
	F. 1,026	269	15	563	310	91	406	16	945	11	70	2,069	1,653	3,721
	P. 2,194	999	67	1,693	1,329	403	1,076	33	2,169	37	198	4,515	5,683	10,198
Rural.....	M. 44	35	—	22	16	—	8	—	65	3	9	79	124	203
	F. 27	8	—	7	5	3	—	—	55	—	2	69	34	107
	P. 69	43	—	30	21	3	10	—	120	3	11	148	162	310
TOTAL.....	M. 1,212	765	52	1,151	1,035	312	678	17	1,289	29	137	2,525	4,152	6,677
	F. 1,051	277	15	572	315	94	408	16	1,000	11	72	2,138	1,693	3,831
	P. 2,263	1,042	67	1,723	1,350	406	1,086	33	2,289	40	209	4,663	5,845	10,508

TABEL 19.—HUISTALE WAT GEPRAAKT WORD —ASIATE.

BY 166.

TAGES—HUISTALE.							Geslag.
Japanees.	European Languages.	Other.	Uns.	Under 21.	21 +	Total.	
Japanees.	Europees Tale.	Ander.	Onges.	Onder 21.		Totaal.	
JNIE.							
130	2,259	107	276	43,144	38,548	79,692	M. Stedelik.
19	1,875	63	207	41,030	24,863	65,902	V.
149	4,134	170	483	84,183	61,411	145,594	P.
1	237	24	63	22,507	16,952	39,459	M. Plattelands.
—	176	15	40	22,453	12,185	34,638	V.
1	413	39	103	44,960	29,137	74,097	P.
131	2,496	131	339	65,651	53,500	119,151	M. TOTAAL.
19	2,051	78	247	63,492	37,048	100,540	V.
150	4,547	209	586	129,143	90,548	219,691	P.

AAP.

17	1,234	26	128	2,446	4,028	6,474	M. Stedelik.
16	945	11	70	2,069	1,655	3,724	V.
33	2,169	37	198	4,515	5,683	10,198	P.
—	65	3	9	79	124	203	M. Plattelands.
—	55	—	2	69	38	107	V.
—	120	3	11	148	162	310	P.
17	1,289	29	137	2,525	4,152	6,677	M. TOTAAL.
16	1,000	11	72	2,138	1,693	3,831	V.
33	2,289	40	209	4,663	5,845	10,508	P.



# INDEX SUMMARY

## CHAPTER 49

### INSTITUTIONAL BUILDINGS

**Includes the following: Generally with medical care:—**

Childrens' home	Medical unit
Day nursery	Nursery
Home for the blind	Old people's home
Hospital	Orphan asylum
Infirmary	Sanitarium
Insane asylum	

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INDEX SUMMARY  
CHAPTER 50  
BUSINESS UNITS



# INDEX SUMMARY

## CHAPTER 50

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CHAPTER 51  
HAZARDOUS USE UNITS





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CHAPTER 52

GARAGES



# INDEX SUMMARY

## CHAPTER 52

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THEATRES



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## Aisles, transverse:—

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## Exits, Public Normal Vertical:—(Cont.)

## Proscenium boxes:—

At least 1 required . . . . .	53-62
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Lead to main floor of auditorium . . . . .	53-62

## Stairways with direct balcony or mezzanine entrance:—

1 hr. separation from auditorium . . . . .	53-64
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Open in foyer and lobby . . . . .	53-64
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Open in foyer and lobby . . . . .	53-64
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## Width: 20 in. per 100 persons . . . . .

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## Exits, Ramps:—

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Defined	53-1
Slope, max. 1 in 12	53-1
Steps prohibited	53-26
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Equipment: Projectors	53-161
Shelves, furniture, etc.	53-162
Film storage: In metal containers	53-163
One day's supply only	53-33
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Handrails on stairs may be wood	53-24
Remodeling to comply in existing theatres	53-5
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Area, 50 sq. ft. for each device	53-33
Ceiling height, 8 ft. min.	53-33
Defined as room containing projector	53-1
Equipment permitted	53-33
Fixtures, furniture, trim, etc. to be non-combustible	53-24
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Design and construction	53-136
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Provided: Room area is over 100 sq. ft....	53-45	53-92	53-93
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Arms required for all fixed seats.....	53-130
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Defined as over 10 rows.....	53-1
6 rows max. between front and transverse side.....	53-56
9 rows max. between transverse aisles.....	53-56
Transverse aisle required in rear.....	53-56
Bank of seats:—	
Defined as rows at different levels.....	53-1
15 banks max. on main floor without cross aisle.....	53-67
Unless: Each aisle has direct exit.....	53-67
Fixed seats are required.....	53-131
Except: In boxes, portable seats allowed:—	
1 for each 5 sq. ft. floor area.....	53-131
20 max. allowed.....	53-131
Prohibited on sloping floor.....	53-131
Group of seats defined: 2 or more.....	53-1
Level terraces on main floor.....	53-28
Except: Ramps to aisles permitted.....	53-28
Extra aisle, 2 ft. wide permitted.....	53-28
Main floor: 15 rows max. without cross aisle.....	53-67
Except: With direct exit for each aisle.....	53-67
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## Seats:—(Cont.)

Number in rows and between aisles:—

Balcony:—

6 rows max. between front and transverse side.....	53-56
9 rows max. between transverse aisles.....	53-56
12 seats max., between aisles.....	53-128
6 seats max., aisle on 1 end only.....	53-128

Main floor:—

12 seats max., between aisles.....	53-128
Except: Add 1 seat for each 1 in. over 34 in. back to back.....	53-128
Except: If 42 in. back to back:—	
1. 48 seats max. between aisles, or.....	53-128
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Portable allowed in boxes, level floors only:—

1 for each 5 sq. ft. of floor area.....	53-131
20 max. number allowed.....	53-131

Row, defined: Adjoining seats side by side.....

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Self-raising: Main floor:—

2 rows required opposite emergency exit door.....	53-132
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Spacing: 18 in. between rearmost point of back and foremost point of arm of seat in row behind.....

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Spacing: Regular seats:—

34 in. back to back.....	53-129
16 in. min., back of seat to foremost point of arm of seat in row behind.....	53-129

Spacing: Self-raising seats:—

18 in. between rearmost point of back and foremost point of arm of seat in row behind.....	53-132
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Width: 90% of all seats:—

20 in. center to center of arms.....	53-130
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Width: 10% of all seats may be:—

19 in. center to center of arms.....	53-130
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Secondary entrance: Any other than principal.....

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Stadium type auditorium:—

Longitudinal aisle leads to transverse aisle.....	53-50
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Rearmost transverse aisle:—

Shall have inside normal exit doorway, or vomitory leading to such doorway for each side of auditorium.....	53-60
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Stadium type auditorium:—(Cont.)			
Rearmost transverse aisle:—(Cont.)			
Such doorway: 20 in. per 100.			53-60
4 ft. min. width.			53-60
Transverse aisle: Both normal and emergency exit.	53-57		53-67
Stage Block:—			
Alterations to comply in existing theatres.			53-5
Basement: Finish and fixtures to be non-combustible.			53-24
Depth, Type 1: 3 ft. max.			53-30
9 ft. max., 180 sq. ft. extra area.			53-30
Doors:—			
Inner vestibule door: Non-combustible.			53-23
Outside exit doors: 2 required from opposite sides of stage.			53-95
Outside stage block door to be vestibuled.			53-23
Projection block in stage block.			53-23
Property room in stage block.			53-23
Storage room in stage block.			53-23
Handrail may be wood.			53-24
Highest point in Type 1 Stage:—			
4 ft. max., above proscenium opening.			53-30
35 ft. max., above stage floor.			53-30
Parapet wall required.			53-15
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INDEX SUMMARY  
CHAPTER 54  
OPEN AIR ASSEMBLY UNIT





# INDEX SUMMARY

## CHAPTER 54

### OPEN AIR ASSEMBLY UNIT

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INDEX SUMMARY  
CHAPTER 55  
PUBLIC ASSEMBLY UNIT



# INDEX SUMMARY

## CHAPTER 55

### PUBLIC ASSEMBLY UNIT

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SCHOOLS





# INDEX SUMMARY

## CHAPTER 57

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- Study rooms (same as Class Rooms)
- Teaching Amphitheatre

Amphitheatre: see Teaching Amphitheatre

Annexes: see Construction

Annual inspection..... 46-2

#### Assembly Rooms:—

##### Aisles:—

14 seats in row between aisles..... 57-39

7 seats in row between aisle and wall..... 57-39

##### Steps permitted:—

Aisles to seat spaces only..... 57-39

Bank to bank of seats..... 57-39

Teaching amphitheatres..... 57-39

Width, 18 in. per 100 persons..... 57-39

Width, 2 ft. 6 in. min..... 57-39

##### Balconies for spectators:—

Exits permitted to more than 1 story..... 57-19

Permitted only in Fireproof and Semi-fireproof construction..... 57-19

Prohibited in Heavy Timber construction..... 57-19

Prohibited in Ordinary construction..... 57-19

##### Capacity limits:—

Semi-fireproof construction, max. 1,500 persons..... 57-18

Heavy Timber construction, max. 600 persons..... 57-18

Ordinary construction, max. 600 persons..... 57-18

Exception: Annexes may have max. of 1,500 persons..... 57-18

Combustible scenery used, see Stage, Type II

##### Corridors from assembly rooms:—

Over 800 capacity, 27 in. per 100 persons..... 57-38

Increase 10% for each 5 ft. over 20 ft. above grade..... 57-38

Width, 6 ft. min..... 57-32

Defined, room over 1,500 sq. ft., used for assembly..... 57-7

##### Doors from assembly rooms:—

2 required, 300 or less capacity..... 57-37

3 required, over 300 capacity..... 57-37

Open into alley, street, foyer, public passage, or into 10 ft. open space leading to street..... 57-37

##### Perimeter distance, center to center:—

If 2 required, 40% of perimeter..... 57-37

If 3 required, 2 others at least 15% of perimeter..... 57-37

Width, 27 in. per 100 persons..... 57-38

Increase 10% for each 5 ft. over 20 ft. above grade..... 57-38

2 ft. 8 in. min..... 57-32

##### Floor levels:—

##### Fireproof construction:—

Unlimited above grade..... 55-17

6 ft. max. below grade..... 57-17

##### Non-fireproof construction:—

10 ft. max. above grade..... 57-18

6 ft. max. below grade..... 57-18

Illumination: Exit: see Lighting, Exit, General Index

General: 2 ft. candles, plane 30 in. up..... 57-80

Lighting, exit: See Lighting, Exit: General Index

Additional: Rooms over 1,800 capacity..... 57-82

Additional: Rooms over 1,500 capacity..... 66-3

Normal..... 57-81 66-2

Projection booths: Conform to Theatre Code..... 57-21

Scenery, combustible: See Stage, Type II

## Assembly Rooms:—(Cont.)

## Seats:—

14 in. row between aisles. . . . .	57-39
7 in. row between aisle and wall. . . . .	57-39
34 in. back to back, seats with back. . . . .	57-40
26 in. back to back, no backs. . . . .	57-40
Rise: Bank to bank, 21 in. max. . . . .	57-41
Width with arms, 20 in., except Teaching Amphitheatre. . . . .	57-68
Width, no arms, 18 in., except Teaching Amphitheatre. . . . .	57-68

Signs, exit: See General Index

## Stage: General:—

Acoustical treatment. . . . .	57-71	61-57	to 61-59
Curtains. . . . .	57-71		57-72
Equipment. . . . .	57-71		57-72

Stage, Type 2: Conform to Theatre Code. . . . . 57-20

## Stairs from assembly room:—

Over 800 capacity, 22½ in. per 100. . . . .	57-38
Increase 10% for each 5 ft. above 20 ft. over grade. . . . .	57-38
Width, min. 3 ft. 8 in. . . . .	57-32
Ventilation, see Chap. 81. . . . .	81-7

## Balconies, Spectators:—

Exits permitted to more than 1 story. . . . .	57-19
Permitted in Fireproof construction. . . . .	57-19
Permitted in Semi-fireproof construction. . . . .	57-19
Prohibited in Heavy Timber construction. . . . .	57-19
Prohibited in Ordinary construction. . . . .	57-19
Same Aisle, Seat, and Exit requirements as Assembly Rooms	

## Basement:—

Class, study and instruction rooms prohibited. . . . .	57-23
Defined: Floor level over 2 ft. below grade, and ceiling 8 ft. or less above grade. . . . .	57-1

## Cafeterias:—

Excluded from school capacity computations. . . . .	57-5
Exits, over 800 sq. ft. area:—	
2 required. . . . .	57-58
Distance apart on perimeter, 40% c.-c. . . . .	57-58
Width: 27 in. per 100 persons. . . . .	57-58
Doors, 2 ft. 8 in. min. . . . .	57-32
Stairs, 3 ft. 8 in. min. . . . .	57-32
Lighting, 2 ft. candles on plane 30 in. up. . . . .	57-80
Mechanical ventilation, food heating rooms. . . . .	57-67
Skylights (if no windows) 10% of floor area, ½ to open. . . . .	57-67
Windows (if no skylights) 10% of floor area, ½ to open. . . . .	57-67

## Capacity:—

Assembly room: Total of main floor, stage, balconies . . . . .	57-7		
Based on fixed seats plus factor computations . . . . .	57-5	62-2	62-3
Excluded from capacity computations:—			
Assembly rooms, fixed seats provided elsewhere . . . . .	57-5		
Bicycle rooms . . . . .	57-5		
Boiler rooms . . . . .	57-5		
Cafeterias, and other eating rooms . . . . .	57-5		
Corridors . . . . .	57-5		
Fuel storage rooms . . . . .	57-5		
Furnace rooms . . . . .	57-5		
Gymnasiums, fixed seats provided elsewhere . . . . .	57-5		
Locker rooms . . . . .	57-5		
Offices, not used for instructor . . . . .	57-5		
Other rooms, seats provided elsewhere . . . . .	57-5		
Rooms not entered by students . . . . .	57-5		
Storage rooms . . . . .	57-5		
Toilet rooms . . . . .	57-5		
Factors . . . . .			62-3

## Ceiling Height:—

Assembly rooms: 12 ft. min. . . . .	57-16
Balconies: Need not exceed 8 ft., above or below. . . . .	57-16

Ceiling Height:—(Cont.)

Cafeterias, no mechanical ventilation: 12 ft. min. ....	57-25
Cafeterias, with mechanical ventilation: 10 ft. 6 in. min. ....	57-25
Cafeterias, lunches from outside: No requirements. ....	57-25
Class rooms, area 200 sq. ft. or less: 10 ft. min. ....	57-23
Class rooms, over 200 sq. ft.: 12 ft. min. ....	57-23
Gymnasiums: 12 ft. min. ....	57-16
Measurement, floor line to lowest ceiling line. ....	57-22
Play rooms; 10 ft. min. ....	57-26
Projections permitted 12 in. below ceiling. ....	57-22
Recreation rooms: 10 ft. min. ....	57-26
Rooms serving food:—	
Lunches from outside, no requirements. ....	57-25
No mechanical ventilation: 12 ft. min. ....	57-25
With mechanical ventilation: 10 ft. 6 in. min. ....	57-25
Study rooms, 200 sq. ft. or less: 10 ft. min. ....	57-23
Study rooms, over 200 sq. ft.: 12 ft. min. ....	57-23
Toilet rooms: 9 ft. min. ....	57-27

Classification:—

Elementary, Class I. ....	57-2
High schools, Class I. ....	57-2
Colleges, Class II. ....	57-2
Commercial, Class II. ....	57-2
Fine Arts, Class II. ....	57-2
Vocational, Class II. ....	57-2
Single dwelling, sitting less than 10. ....	57-4

Class Rooms:—

Aisles:—	
1-18 in. aisle required along each wall. ....	57-44
Cross aisles: 30 in. min. width. ....	57-44
Intermediate aisles: 16 in. min. width. ....	57-44
Main aisle: 30 in. min. width. ....	57-44
Seats: 14 in row between aisles. ....	57-44
With arms: 20 in. wide. ....	57-68
No arms: 18 in. wide. ....	57-68
Teaching amphitheatre, excepted, which see. ....	57-68
Capacity factor 18. ....	62-3
Doors, outside exit:—	
8 ft. min. distance to lot line. ....	57-9
Increase 1 ft. for each story over 4, Class I school. ....	57-9
Increase $\frac{1}{2}$ ft. for each story over 4, Class II school. ....	57-9
Exception: Facing alley, street, or public space over 10 ft. wide. ....	57-9

Doors required:—

800 or less capacity:—	
1 leading direct to main corridor, or 1 leading direct to outer air. ....	57-43
Over 800 capacity:—	
2 leading direct to outer air or main corridor. ....	57-43
Exception: 1 may lead to other class room. ....	57-43
Width, min. 2 ft. 8 in. ....	57-32
Illumination, 5 ft. candles on plane 30 in. up. ....	57-80
Live load, 50 lb. per sq. ft. ....	70-1

Ventilation, choice of 1 of 2 ways:—

1. Net opening area, 8% of floor area. ....	57-64	65-2
2. Mechanical ventilation. ....	57-64	65-2

Windows, required:—

8 ft. min. distance to lot line. ....	57-9
Increase 1 ft. for each story over 4, Class I schools. ....	57-9
Increase $\frac{1}{2}$ ft. for each story over 4, Class II schools. ....	57-9
Exceptions: Facing alley, street, or public space over 10 ft. wide. ....	57-9

Closets, prohibited under stairs, non-fireproof buildings. ....	57-28
Colleges are Class II. ....	57-2

Combined Class I and Class II schools:—

Must conform to Class I code. ....	57-3
Except: If separated by fire walls. ....	57-3
Shall be separated from each other. ....	57-30

Commercial schools are Class II. ....	57-2
---------------------------------------	------

## Commercial training rooms:—

## Partitions, rooms 250 sq. ft. or less:—

Glazed from 3 ft. up to 7 ft. 6 in. ....	57-24
--	-------

Height may be 7 ft. 6 in. ....	57-24
--------------------------------	-------

Ventilation, same as class rooms. ....	57-24
--	-------

## Construction:—

## Annexes, 1 story, or 1 story and basement:—

## Unprotected roof steel and columns, if:—

1. Used as assembly room, gymnasium, etc. ....	57-14	61-51
--	-------	-------

2. 1,500 capacity or less. ....	57-14	61-51
---------------------------------	-------	-------

3. Principal steel, 20 ft. up. ....	57-14	61-51
-------------------------------------	-------	-------

4. 2 $\frac{5}{8}$ in. roof sheathing. ....	57-14	61-51
---	-------	-------

5. 3 hr. separation, 60 min. doors. ....	57-14	61-51
--	-------	-------

Basements, floor above, 3 hr. construction. ....	57-13
--	-------

## Fireproof required:—

Over 4 stories high. ....	57-10
---------------------------	-------

Over 50 ft. from grade to 4th floor. ....	57-10
---	-------

## Except: Omit fireproofing:—

Roof members over 20 ft. above floor. ....	57-10
--	-------

1 hr. construction for roof slabs, etc. ....	57-10
--	-------

Certain annexes, see Construction, Annexes	
--	--

## Semi-fireproof construction required:—

1 story: Over 600 capacity. ....	57-11
----------------------------------	-------

4 stories or less, 50 ft. or less to 4th floor. ....	57-11
--	-------

Assembly room must be 1,500 or less capacity. ....	57-18
--	-------

Gymnasium must be 1,500 or less capacity. ....	57-18
--	-------

## Except:—

2 stories, 200 capacity or less, may be Ordinary construction. ....	57-12
---	-------

Floor over basement must be fireproof. ....	57-13
---	-------

## Ordinary construction required:—

1 story high: 600 or less capacity. ....	57-12
--	-------

2 stories or less: 200 or less capacity. ....	57-12
---	-------

Assembly room must be 600 or less. ....	57-18
---	-------

Gymnasium must be 600 or less. ....	57-18
-------------------------------------	-------

## Except:—

Floor above basement must be fireproof. ....	57-13
--	-------

Portable buildings, which see. ....	57-15
-------------------------------------	-------

## Portable Buildings:—

1 story only. ....	57-15
--------------------	-------

28 ft. by 35 ft. max. size. ....	57-15
----------------------------------	-------

10 ft. away from any other building. ....	57-15
---	-------

2 years limit on use. ....	57-15
----------------------------	-------

2 exit doors, separated by small building width. ....	57-15
---	-------

Non-combustible roof covering. ....	57-15
-------------------------------------	-------

Used as school only. ....	57-15
---------------------------	-------

Cooling. ....	57-77
---------------	-------

Corridors: see Exit Corridors	
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## Crippled children:—

Elevators: Area: 4 sq. ft. per person. ....	57-55
---	-------

Empty in 20 min., over 2nd floor. ....	57-55
--	-------

Required: Floors over 2nd. ....	57-55
---------------------------------	-------

## Curtains:—

Draw: No combustible scenery. ....	57-70
------------------------------------	-------

Fire: Combustible scenery. ....	57-70
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## Defined as place of instruction. ....

40-18

Defined as single dwelling, sitting 10 or less. ....	57-4
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## Doors, revolving:—

Permitted, Class II schools, in addition. ....	57-54
--	-------

Prohibited in Class I schools. ....	57-54
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## Drinking fountains:—

1 for each 250 students. ....	57-76
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1 in each story. ....	57-76
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## Eating rooms: see Cafeterias

Elementary schools are Class I. ....	57-2
--------------------------------------	------

## Elevators: Crippled children's school:—

Area: 4 sq. ft. per person.....	57-55
Empty floors above 2nd in 20 min.....	57-55
Required to serve all floors over 2nd.....	57-55

## Exits, Cafeterias over 800 sq. ft. area:—

2 required.....	57-58
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## Distance separation of center lines:—

40% of perimeter on perimeter.....	57-37	57-58
------------------------------------	-------	-------

Doors swing in egress direction.....	64-17
--------------------------------------	-------

Width, 27 in. per 100 capacity.....	57-58
-------------------------------------	-------

Width, 3 ft. 8 in. for stairway, general.....	57-32
---	-------

Width, 2 ft. 6 in. for basement stair.....	57-32
--	-------

## Exit Corridors from Assembly Rooms:—

Width, when over 800 capacity:—	
---------------------------------	--

27 in. per 100 persons.....	57-38
-----------------------------	-------

Increase 10% for each 5 ft. over 20 ft. above grade....	57-17	57-38
---	-------	-------

6 ft. min., unobstructed.....	57-32
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## Exit Corridors, other than from Assembly Rooms:—

Defined as main and secondary.....	57-33
------------------------------------	-------

Door not permitted to obstruct main corridor.....	57-36
---	-------

Door permitted, not obstructing main corridor when open.....	57-36
--	-------

Doors permitted, shutting off independent sections.....	57-36
---	-------

Lockers, doors open or closed: Must not obstruct.....	57-35
---	-------

Main: Defined, connecting student rooms with exits.....	57-33
---	-------

Terminates directly in stair access, or at right angle to stair access.....	57-34
---	-------

Obstructions prohibited: Passages 7 ft. or less.....	64-23
--	-------

Secondary, other than main corridor.....	57-33
--	-------

Width: Based on capacity.....	57-5	57-31	62-2	62-3
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18 in. per 100 persons.....	57-31
-----------------------------	-------

6 ft. min. unobstructed main corridor.....	57-32
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## Exit Courts:—

Doors open easily from inside, no key.....	57-57
--	-------

Height, 6 ft. 6 in. min.....	57-57
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Lead directly to passage to main stair or corridor.....	57-57
---	-------

Swing in direction of egress.....	64-18
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Width, 3 ft. min.....	57-57
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## Exit Doors from Assembly Rooms:—

## Location, distance separation on perimeter:—

If 2 required, 40% of perimeter.....	57-37
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If 3 required, 1 distance 40% of perimeter.....	57-37
---	-------

And other 2, at least 15% of perimeter.....	57-37
---	-------

All measured on perimeter, c.-c.....	57-37
--------------------------------------	-------

Number: 300 or less capacity, 2 required.....	57-37
---	-------

Over 300 capacity, 3 required.....	57-37
------------------------------------	-------

Open into foyer, public passage, street, alley, or.....	57-37
---	-------

Open into 10 ft. open space leading to street or alley.....	57-37
---	-------

Swing in direction of egress.....	64-17
-----------------------------------	-------

## Width, when over 800 capacity

27 in. per 100 persons.....	57-38
-----------------------------	-------

Increase 10% for each 5 ft. over 20 ft. above grade.....	57-38
--	-------

2 ft. 8 in. min.....	57-32
----------------------	-------

See Exit Doors, Outside

## Exit Doors, other than from Assembly Rooms:—

## Class rooms, 800 or less capacity:—

1 required direct to main corridor.....	57-43
---	-------

Or 1 direct to outer air.....	57-43
-------------------------------	-------

## Class rooms, over 800 capacity:—

2 direct to outer air or main corridor.....	57-43
---	-------

Except: 1 may lead to other class room.....	57-43
---	-------

Permitted to shut off sections each with own exits.....	57-36
---	-------

Swing in direction of egress.....	64-17
-----------------------------------	-------

Study rooms, same as class rooms.....	57-43
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Toilet room doors, 20 ft. between "Male" and "Female".....	57-73
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Width: Based on capacity.....	57-5	57-31	62-2	62-3
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18 in. per 100 persons.....	57-31
-----------------------------	-------

2 ft. 8 in. min.....	57-32
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Exit doors, Outside: Class I Schools:—	
2 required, leading direct to street.....	57-52
Or by 10 ft. alley or open space.....	57-52
Class room outside exit doors:—	
8 ft. min. distance to lot line.....	57-9
Increase 1 ft. for each story over 4.....	57-9
Exception: When facing street, alley, or public space over 10 ft. wide.....	57-9
Location: Direct from stair inclosure.....	57-53
Perimeter distance separation to be 30% of perimeter, on perimeter...	57-53
Revolving doors prohibited.....	57-54
Swing out.....	64-18
Width: Combined width, cumulative.....	57-31
2 ft. 8 in. min.....	57-32
18 in. per 100 capacity.....	57-31
Exit doors, Outside: Class II Schools:—	
2 required, leading direct to street.....	57-52
Or by 10 ft. alley or open space.....	57-52
Class room, outside exit doors:—	
4 ft. min. distance to lot line.....	57-9
Increase $\frac{1}{2}$ ft. for each story over 4.....	57-9
Exception: When facing street, alley, or public space over 10 ft. wide.....	57-9
Location, Perimeter distance separation:—	
30% of perimeter on perimeter.....	57-53
Revolving doors permitted if in addition to requirements.....	57-54
Swing in direction of egress.....	64-18
Width: Combined width due to greatest floor capacity, plus assembly halls.....	57-31
2 ft. 8 in. min.....	57-32
18 in. per 100 capacity.....	57-31
Exit doors: Portable Schools:—	
2 required: Separated by smallest building width.....	57-15
Width: 2 ft. 8 in. min.....	57-32
Exit ramps: Same as stairs.....	64-53
Exits, roof:—	
When roof is used for assembly uses.....	57-56
1 stair required.....	64-11
Exit signs: see Signs, exit: General Index	
Exit stairs from Assembly Room:—	
Width: When over 800 capacity:—	
22 $\frac{1}{2}$ in. per 100 persons.....	57-38
3 ft. 8 in. min.....	57-32
Increase 10% for each 5 ft. over 20 ft. above grade...	57-17
See Exit Stairs, General	
Exit Stairs: General:—	
See Exit Stairs from Assembly Rooms	
Basement stairs:—	
Cut, 9 in. min.....	57-49
Exit same as stairs.....	57-47
Lead direct to horizontal exit to outer air.....	57-49
Rise, 8 in. max.....	57-49
2 ft. 6 in. min. width.....	57-32
Cut, min. 10 in.....	64-31
Doors to inclosures: 45 min.....	64-28
Swing toward egress.....	64-17
Handrails:—	
1 required on stairs 3 ft. 6 in. or less.....	64-34
2 required on stairs over 3 ft. 6 in. to 7 ft. 0 in.....	64-34
End newel posts 5 ft., intermediate rails.....	64-34
End returned and joined to wall.....	64-34
Extend to front edge of third tread.....	64-34
Height, 2 ft. 6 in. to 3 ft. 0 in., front edge of tread.....	64-34
Intermediate required, stair over 7 ft. wide.....	64-34
Wood permitted.....	64-34
Height of flights, Class I School: 11 ft. 6 in. ....	57-51
Height of flights, Class II School: 13 ft. 6 in.....	64-33
Inclosure required, except in main story.....	64-28
Landings required at each story, Class I schools.....	57-48

**Exit Stairs: General:—(Cont.)**

Landing shall be as wide as stair.....	64-32
Except 4 ft. intermediate, in straight stairs.....	64-32
Location:—	
Class I school: Against exterior wall.....	57-47
In any story above or below main exit level:—	
Dead end corridor: 60 ft. max. from door to stair.....	57-47
All other cases: 90 ft. max. from door to stair.....	57-47
Measured: Door center line to 1st riser.....	57-47
Number, 2 min. required in all schools:—	
Having class rooms above or below main floor.....	57-45
Outside exit door direct from stair.....	57-47
Rise, $7\frac{1}{2}$ in. max.....	64-31
Risers, if any, at least 3 required.....	64-33 57-51
Roofs, at least 1 required.....	64-11
Sharp internal wall angles eliminated.....	64-39
Start at highest level.....	57-46
Steps, if any: At least 3 required.....	57-51 64-33
Teaching amphitheatre:—	
Width required: 18 in. per 100 persons.....	57-42
2 ft. 6 in. min.....	57-42
Width:—	
Based on capacity.....	57-5 57-31 62-2 62-3
15 in. per 100 persons.....	57-31
3 ft. 8 in. min.....	57-32
2 ft. 6 in. min. for basement stairs.....	57-32
Cumulative increase to outer exit:—	
Class I Schools.....	57-31
Class II Schools open stairs.....	57-31
Class II Schools: Inclosed stairs: Computed on greatest floor capacity.....	57-31
<b>Fine Arts schools are Class II.</b>	57-2
Fire alarm systems:—	
Red light at teacher's desk: School for deaf.....	57-78
Required, all schools.....	57-78
Fire curtain: Type II stage.....	57-70 53-135 to 53-160
Fireproofing omitted: see Construction	
Fire protection:—	
Fire alarm systems.....	57-78
Schools for deaf, red desk light.....	57-78
Fire separations: see Multiple Occupancy	
Floor Levels: Assembly rooms or gymnasiums:—	
Fireproof construction:—	
Unlimited above grade.....	57-17
6 ft. max. below grade.....	57-17
Non-fireproof construction:—	
10 ft. max. above grade.....	57-18
6 ft. max. below grade.....	57-18
Frontage on open spaces:—	
Class I School, 1 street and 1 open space.....	57-8
Class II School, 1 street.....	57-8
<b>Gymnasiums:—</b>	
Capacity factor is 5 for assembly space.....	62-3
Capacity factor is 50 for playing space.....	62-3
Other requirements: Same as for Assembly Rooms	

**Handrails: See Exit Stairs**

Heating plant separation: 2 hr. construction required.....	61-84
Heating, temperature to be maintained.....	80-3
High schools are Class I.....	57-2

**Illumination, exit: see Lighting, exit: General Index****Illumination, on plane 30 in. above floor:—**

Assembly rooms: 2 ft. candles.....	57-80
Cafeterias: 2 ft. candles.....	57-80
Class rooms: 5 ft. candles.....	57-80



## Illumination, on plane 30 in. above floor:—(Cont.)

Food serving rooms: 2 ft. candles.....	57-80
Laboratories: 5 ft. candles.....	57-80
Libraries: 5 ft. candles.....	57-80
Locker rooms: 1 ft. candles.....	57-80
Lunch rooms: 2 ft. candles.....	57-80
Manual training rooms: 5 ft. candles.....	57-80
Offices: 5 ft. candles.....	57-80
Play rooms: 3 ft. candles.....	57-80
Recreation areas: 1 ft. candles.....	57-80
Sports rooms: 3 ft. candles.....	57-80
Student rooms: not for study: 2 ft. candles.....	57-80
Study halls: 5 ft. candles.....	57-80
Toilet rooms: 1 ft. candles.....	57-80

## Illumination on plane of work:—

Art rooms, 8 ft. candles.....	57-80
Draughting rooms, 8 ft. candles.....	57-80
Fine detail rooms, 8 ft. candles.....	57-80
Sewing rooms, 8 ft. candles.....	57-80

## Instruction room, same as Class Room

## Lecture room: Capacity factor:—

1,500 sq. ft. or less, factor 10.....	62-3
---------------------------------------	------

## Lighting, exit: see Lighting, Exit: General Index

## Lighting, general, see Illumination

## Live Loads:—

Assembly rooms with fixed seats: 75 lbs. per sq. ft.....	70-1
Assembly rooms, no fixed seats: 100 lb. per sq. ft.....	70-1
Class rooms: 50 lb. per sq. ft.....	70-1
Corridors: 100 lb. per sq. ft.....	70-1
Gymnasiums: 100 lb. per sq. ft.....	70-1
Stairways: 100 lb. per sq. ft.....	70-1

## Lockers not to encroach on required width of exits..... 57-35

## Lunch rooms: see Cafeterias

## Motion picture booths: see Projection booths

## Multiple Occupancy:—

Business unit, 2 hr. separation.....	63-3I
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Doors, communicating.....	63-7
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Multiple dwelling, 4 hr. separation.....	63-3I
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Permitted, general.....	57-29
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Single dwellings, 4 hr. separation.....	63-3I
Theatre: Class II school, 4 hr. separation.....	63-3I
With Class I school, prohibited.....	63-2
Wiring, independent for each use.....	63-5

## Partitions, office type 7 ft. 6 in. high:—

Glazed from 3 ft. up to full height.....	57-24
Inclosure area not over 250 sq. ft.....	57-24
Ventilation equal to class room requirements.....	57-24

## Plan approval required by Fire Prevention Department..... 12-24

## Playroom: Used only for play or recreation..... 57-1

## Portable buildings..... 57-15

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INDEX SUMMARY

CHAPTER 58

OTHER BUILDINGS AND STRUCTURES



# INDEX SUMMARY

## CHAPTER 58

### OTHER BUILDINGS AND STRUCTURES

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Jails	Prisons
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CHAPTER 82

PLUMBING



# INDEX SUMMARY

## CHAPTER 82

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Lintels, Loose Need not be fireproofed:— Openings not more than 3½ ft.		Lintels, Loose Same as in F.P. Const.	
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<b>STRUCTURAL FRAME</b> Sec. 67-39 67-40		<b>STRUCTURAL FRAME</b> Sec. 67-50	
Exterior Walls:— Metal framing Reinforced concrete framing Or any combination		Exterior Walls:— Same as in Heavy Timber Const.	
Other Structural Members:— Metal Reinforced concrete Masonry Timber Or any combination		Other Structural Members:— Same as in Heavy Timber Const. except that no fireproofing is required, unless specified under general occupancy sections, and there is no limitation on the size of wood members, except as determined by strength.	
Columns, Exterior. . . . .	4 hour	Columns, Exterior; No requirements	
Columns, Interior. . . . .	2 hour	Columns, Interior; No requirements	
Columns, Timber, Min. dimension 9½ in.		Columns, Timber; No requirements	
Members Supporting Walls. . . . .	3 hour	Members Supporting Walls	
Except columns		Multiple Dwellings. . . . .	48-32 48-35
Timber, not supporting roof:—		Timber:—	
Beams } Min. dimension 5½ in.		Beams } No size limitations for either	
Girders } Min. area 52 sq. in.		Girders } floor or roof	
Trusses }		Trusses } Strength requirements only	
Timber, supporting roof only:—			
Beams }			
Girders } Min. dimension 3½ in.			
Trusses }			
Interior Members. . . . .	2 hour	Interior Members	
Beams: Other than timber. . . . .	2 hour	Beams }	
Girders: Other than timber. . . . .	2 hour	Girders } Strength requirements only	
Trusses: Other than timber. . . . .	2 hour	Trusses }	
Fireproofing not required:—		Fireproofing not required:—	
1. Where clear height above floor is 20 ft. or more		Except:—	
2. Lintels, loose, supporting 1 story only		Multiple dwellings. . . . .	48-32 48-35
3. Metal connections for timber members		Lintels: Wood permitted behind arches only	

HEAVY TIMBER CONSTRUCTION (Cont.)	
<p>FLOOR CONSTRUCTION Sec. 67-41</p>	
<p>Floor Members:—            Except flooring, are included under structural frame            Flooring, min. 3½ in., fastened together            May be 2 layers, lower one 2½ in.            Ceiling, direct against underside of floor, max. air space ½ in.</p>	
<p>ROOF CONSTRUCTION Sec. 67-42</p>	
<p>Roof Members            Except sheathing, are included under structural frame            Sheathing, min. 2⅝ in. not sprinklered            Sheathing, min. 1⅝ in., sprinklered</p>	
<p>EXTERIOR INCLOSING WALLS Sec. 67-43 to 67-45</p>	
<p>Walls, Same as in F.P. Const.</p>	
<p>Bay Windows and Similar Projections:—            Same as in F.P. Const.            Cornices:—            Same as in F.P. Const.</p>	
<p>GROUND AND FURRING 67-47</p>	
<p>Same as in F.P. Const.</p>	
<p>PARTITIONS Sec. 67-46</p>	
<p>Incombustible:—            Except in Business Units where subdividing partitions may be wood, or wood and glass, when they are included in areas of 400 sq. ft. or less already inclosed in incombustible partitions.            Sec. 61-69</p>	
<p>COMBUSTIBLE MATERIALS Sec. 67-48</p>	
<p>May be Used:—            Same as in F.P. Const            Except:—            Sleepers, Wood, prohibited            Combustible lath, prohibited            Wood stud partitions, prohibited</p>	

ORDINARY CONSTRUCTION (Cont.)	
<p>FLOOR CONSTRUCTION Sec. 67-51 67-52</p>	
<p>Floor Members:—            Wood            Trussed steel joists            Flooring, no restrictions</p>	
<p>Ceilings, Basement            Metal lath and plaster required in buildings over 2 stories            See Occupancy Chapters 47 to 58</p>	
<p>ROOF CONSTRUCTION Sec. 67-51 67-52</p>	
<p>Roof Members            Wood            Trussed steel joists            Sheathing, no restrictions</p>	
<p>EXTERIOR INCLOSING WALLS Sec. 67-54 to 67-56</p>	
<p>Walls, ..... 3 foot</p>	<p>Const.</p>
<p>Masonry            Reinforced concrete            Bay Windows and Similar Projections:—            Same as in F.P. Const.            Cornices:—            Projecting over street or alley, shall be completely incombustible</p>	
<p>GROUND AND FURRING</p>	
<p>No restrictions</p>	
<p>PARTITIONS Sec. 67-57</p>	
<p>Wood Stud Permitted:—            Lathed with:—            Wood            Metal lath            Gypsum            Fiber            Lath, metal; and ⅝ in. plaster            Lath, all other; and ¾ in. plaster            Except, wood stud bearing partitions may be used only in single dwellings</p>	
<p>COMBUSTIBLE MATERIALS</p>	
<p>May be Used:—            Except: Wood stud bearing partitions may be used only in single dwellings 67-51            Except: As specified in partitions above.</p>	

WOOD CONSTRUCTION		WOOD CONSTRUCTION (Cont.)	
Outside Fire Limits:—		Walls	
Business Units.....	{Sec. 62-7 Sec. 50-10	Sheathing to be wood.....	67-61
Multiple Dwellings.....	48-38	Roofs	
Single Dwellings.....	47-4	Sheathing to be wood.....	67-61
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## FIRE PROTECTIVE COVERING OF METAL MEMBERS

1 Hour	Sec. 68-29	2 Hour	Sec. 68-28	3 Hour	Sec. 68-27	4 Hour	Sec. 68-26
METAL COLUMNS							
Concrete Units—Solid No Fill	2"	Concrete Units—Solid Concrete Units—Hollow	2" 2"	Concrete Units—Solid. Plastered Concrete Units—Hollow. Plastered Concrete Units—Hollow. 2 Units Thick, Staggered Joints Not Plastered	2" 3" 4" 3"	Concrete Units—Solid. Plastered Concrete Units—Hollow. Plastered Concrete—Cast-in-Place	3" 3" 4" 3"
Clay Tile Units—Hollow No Fill	2"	Clay Tile Units—Hollow	2"	Clay Tile Units—Hollow Plastered Clay Tile Units—Hollow 2 Units Thick, Staggered Joints Not Plastered	3" 4" 4"	Clay Tile Units—Hollow Plastered	4"
Plaster on Metal Lath. Port. cement, Lime, or Gypsum	1"	Brick. Gypsum Units—Solid No Fill	2 1/4" 2"	Brick. Gypsum Units—Solid	3 1/2" 3"	Brick. Gypsum Cast-in-Place	3 1/2" 3"
OTHER METAL MEMBERS							
Concrete Cast-in-Place	1 1/2"	Concrete Cast-in-Place	1 1/2"	Concrete Units—Solid Plastered Gypsum Units—Solid	2" 3" 3"	Concrete Cast-in-Place Concrete Units—Solid Plastered	2" 2"
Gypsum Cast-in-Place	1 1/2"	Gypsum Cast-in-Place	1 1/2"	Concrete Units—Hollow. 2 units Thick, Staggered Joints Not Plastered Clay Tile Units—Hollow Plastered Clay Tile Units—Hollow 2 Units Thick, Staggered Joints Not Plastered	4" 2" 4"	Concrete Units—Hollow Plastered Clay Tile Units—Hollow Plastered	3" 3"
Plaster on Metal Lath. Port. cement, Lime, or Gypsum	1"						
LONGITUDINAL REINFORCEMENT OF CONCRETE COLUMNS, BEAMS, GIRDERS, AND TRUSSES							
Concrete	1"					Concrete	1 1/2"
REINFORCEMENT OF SLABS, JOISTS, AND WALLS							
Concrete	2"					Concrete	1"

## FIRE RESISTANCE—FLOORS—ROOFS—CEILINGS—CHICAGO BUILDING CODE—1939

[illegible]

**REDUCTION OF SLAB THICKNESS.**—For the purpose of fire resistive value only, in any floor or roof construction not required to have a protective ceiling on the underside thereof, the required slab thickness may be reduced one-half inch if a protective ceiling of metal lath and plaster is applied thereto. The total thickness of a non-combustible floor finish applied directly to the floor construction, or two-thirds of the thickness of a non-combustible floor fill where such fill is not required may be considered as part of required fireproof floor thickness. Minimum thickness cast-in-place Slabs 24\* Sec. 68-24.

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# INDEX SUMMARY

## OF THE

# NEW CHICAGO

# BUILDING CODE

LIBRARY  
OF THE  
UNIVERSITY OF ILLINOIS

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51-101	1108.07	52-46	1210.02c	53-77	1305.07i-4	53-158	1307.03f-7
51-102	1108.08			53-78	1305.07i-5	53-159	1307.03n
51-103	1108.09	53-1	1301.02	53-79	1305.07i-6	53-160	1307.03o
51-104	1108.10	53-2	1301.03a	53-80	1305.07i-7	53-161	1307.04a
51-105	1108.05	53-3	1301.03b	53-81	1305.07i-8	53-162	1307.04b
51-106	1108.06	53-4	1301.03c-1	53-82	1305.07i-9	53-163	1307.04c
51-107	1108.11	53-5	1301.03c-2	53-83	1305.07i-10	53-164	1307.05
51-108	1108.12	53-6	1301.03c-3	53-84	1305.07j-1	53-165	1307.06
51-109	1108.15	53-7	1301.03c-4	53-85	1305.07j-2	53-166	1307.07
51-110	1108.16	53-8	1301.03c-5	53-86	1305.07j-3	53-167	1307.08a
51-111	1108.17a	53-9	1301.04	53-87	1305.07j-4	53-168	1307.08b
51-112	1108.20	53-10	1301.06	53-88	1305.07j-5	53-169	1307.08c-1
51-113	1108.24	53-11	1301.05	53-89	1305.07j-6	53-169	1308.08c-2
51-114	1108.25a	53-12	1302.01	53-90	1305.07j-7	53-169	1307.08c-3
51-115	1110.04a	53-13	1302.02	53-91	1305.07j-8	53-170	1308.08c-4
51-116	1110.04b	53-14	1302.03	53-92	1305.06	53-171	1307.09
51-117	1110.04c	53-15	1302.04	53-93	1305.08	53-172	1307.10
51-118	1110.04d	53-16	1302.05a	53-94	1305.09a	53-173	1307.11
51-119	1110.06	53-17	1302.05b	53-95	1305.09b	53-174	1308.01a&b
51-120	1109.01	53-18	1302.06	53-96	1305.09c	53-175	1308.02
51-121	1109.02	53-19	1302.07	53-97	1305.09d	53-176	—
51-122	1109.03	53-20	1302.08	53-98	1305.09e	53-177	—
51-123		53-21	1302.09a	53-99	1305.10a	53-178	1309.04
51-124	1109.07	53-22	1302.09b	53-100	1305.10b-1	53-179	1309.01a
51-125	1109.10	53-23	1302.10a	53-101	1305.10b-2	53-180	1309.02a
51-126	1109.04	53-24	1302.10b	53-102	1305.10b-3	53-181	1309.01b-1
51-127	1109.05	53-25	1303.01	53-103	1305.10c-1	53-182	1309.01b-2
51-128	1109.06	53-26	1303.02a	53-104	1305.10c-2	53-183	1309.01b-3
51-129	1109.08	53-27	1302.03b	53-105	1305.11	53-184	1309.01b-4
51-130	1109.09	53-28	1303.02c	53-106	1305.12	53-185	1309.01b-5
51-131	1110.01	53-29	1303.03a	53-107	1305.13	53-186	1309.02b
51-132	1110.02	53-30	1303.03b	53-108	1305.14a	53-187	1309.03a
51-133	1110.03	53-31	1303.03c	53-109	1305.14b	53-188	1309.03b
51-134	1110.07	53-32	1303.04	53-110	1305.14c-1&2	53-189	1309.03c-1
		53-33	1303.05	53-111	1305.14c-3	53-190	1309.03c-2
52-1	1201.01	53-34	1303.06	53-112	1305.14d-1	53-191	1309.03c-3
52-2	1201.02	53-35	1303.07a&b	53-113	1305.14d-2	53-192	1309.03e
52-3	1201.03	53-36	1303.07c	53-114	1306.01a	53-193	1309.03d-1
52-4	1202.01	53-37	1303.07d	53-115	1306.01b	53-194	1309.03d-2
52-5	1202.02	53-38	1304.01	53-116	1306.02	53-195	1309.03d-3
52-6	1203.01a	53-39	1304.02	53-117	1306.04		
52-7	1203.01b	53-40	1304.03a	53-118	1306.03a	54-1	1401.04
52-8	1203.01c	53-41	1304.03b	53-119	1306.03b	54-2	1401.05
52-9	1203.01d	53-42	1304.03c	53-120	1306.03c	54-3	1401.02
52-10	1203.01e	53-43	1304.04	53-121	1306.03d	54-4	1401.06
52-11	1203.01f	53-44	1304.05	53-122	1306.03e&f	54-5	1402.01
52-12	1204.01a	53-45	1305.01	53-123	1306.03g	54-6	1402.02
52-13	1204.01b	53-46	1305.02a	53-124	1306.03h	54-7	1402.03
52-14	1204.01c	53-47	1305.02b	53-125	1306.03i	54-8	1402.04
52-15	1204.02	53-48	1305.02c	53-126	1306.03j	54-9	1403.01
52-16	1204.03	53-49	1305.02d	53-127	1306.03k	54-10	1403.02
52-17	1205.01	53-50	1305.03	53-128	1307.01a	54-11	1403.03
52-18	1205.02	53-51	1305.04	53-129	1307.01b	54-12	1403.04
52-19	1205.03c	53-52	1305.15	53-130	1307.01c	54-13	1401.03
52-20	1205.03b	53-53	1305.16	53-131	1307.01d	54-14	1403.05
52-21	1206.01	53-54	1305.05a-1	53-132	1307.01e	54-15	1403.07
52-22	1206.02a	53-55	1305.05a-2	53-133	1307.02	54-15	1404.03
52-23	1206.02b	53-56	1305.05a-3	53-134	1307.03m	54-16	1403.08
52-24	1206.02c	53-57	1305.05a-4	53-135	1307.03a	54-17	1403.09
52-25	1206.03a	53-58	1305.05a-5	53-136	1307.03b	54-18	1403.10
52-26	1206.03b	53-59	1305.05a-6	53-137	1307.03c	54-19	1404.05
52-27	1206.03c	53-60	1305.05b	53-138	1307.03d-1	54-20	1404.06
52-28	1206.03d	53-61	1305.05c	53-139	1307.03d-2	54-21	1404.07
52-29	1206.04a	53-62	1305.05d-1	53-140	1307.03d-3	54-22	1404.01
52-30	1206.04b	53-62	1305.05d-2	53-141	1307.03e-1	54-23	1403.06b
52-31	1204.04c	53-62	1305.05d-3	53-142	1307.03e-2	54-24	1403.06a
52-32	1206.04d	53-63	1305.05d-4	53-143	1307.03f	54-25	1404.02a
52-33	1206.05a	53-63	1305.05d-5	53-144	1307.03g	54-26	1404.02a-1
52-34	1206.05b	53-64	1305.05d-6	53-145	1307.03h	54-27	1404.02a-2
52-35	1207.01	53-65	1305.07a	53-146	1307.03i	54-28	1404.02a-3
52-36	1207.02a	53-66	1305.07b-1	53-147	1307.03j-1	54-29	1404.02b
52-37	1207.02b	53-67	1305.07b-2	53-148	1307.03j-2	54-30	1404.04
52-38	1208.01a	53-68	1305.07c	53-149	1307.03j-3	54-31	1405.01
52-39	1208.01b	53-69	1305.07d	53-150	1307.03k-1	54-32	1405.02
52-40	1208.01c	53-70	1305.07e	53-151	1307.03k-2	54-33	1406.01
52-40	1208.01d	53-71	1305.07f	53-152	1307.03k-1	54-34	1406.02a



NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL
54-35	1406.02b	55-41	1506.01a	56-24	1606.01e	57-69	1708.09b
54-36	1406.03a&b	55-42	1506.04b	56-25	1606.04f	57-70	1708.02
54-37	1406.03c-1	55-43	1506.04a	56-26	1606.04g	57-71	1708.03a
54-38	1406.03c-2&3	55-44	1506.04d	56-27	1607.01	57-72	1708.03b
54-38	1406.03c-4	55-45	1506.04e	56-28	1607.02	57-73	1708.04a
54-39	1406.07	55-46	1506.05a	56-29	1607.03	57-74	1708.04b
54-40	1406.01a	55-47	1506.05b	56-30	1608.01	57-75	1708.04c
54-41	1406.04b	55-48	1506.05c	56-31	1608.02	57-76	1708.04d
54-42	1406.04c	55-49	1406.05d	56-32	1609.01	57-77	1708.05
54-43	1406.04d	55-50	1506.05e	56-33	1610.01	57-78	1709.01
54-44	1406.04e	55-51	1506.05f	56-34	1610.02	57-79	—
54-45	1406.04f	55-52	1506.05g	56-35	1610.03	57-80	1710.01
54-46	1406.04g	55-53	1506.06	57-1	1701.03	57-81	1710.02
54-47	1406.05a	55-54	1506.07a	57-2	1701.04	57-82	1710.03
54-48	1406.05b	55-55	1506.07b	57-3	1701.05	57-83	1710.04
54-49	1406.05c	55-56	1506.07c	57-4	1701.02	58-1	1801.02
54-50	1406.05d	55-57	1506.07d	57-5	1701.06a	58-2	1802.01
54-51	1406.05e	55-58	1506.07d-1	57-6	1701.06b	58-3	1802.02a
54-52	1406.05f	55-59	1506.07d-2	57-7	1701.06c	58-4	1802.02b
54-53	1406.05g	55-60	1506.07d-3	57-8	1702.01	58-5	1802.03
54-54	1406.05h	55-61	1506.08a	57-9	1702.02	58-5	1802.04c
54-55	1406.06a	55-62	1506.08b	57-10	1703.01	58-6	1802.04a
54-56	1406.06b	55-63	1506.08c	57-11	1703.02	58-7	1802.04b
54-57	1406.08a	55-64	1506.08d	57-12	1703.03	58-8	1802.04d
54-58	1406.08b	55-65	1506.09a	57-13	1703.04	58-9	1802.05a
54-59	1406.08c	55-66	1506.09b	57-14	1703.05	58-10	1802.05b
54-60	1406.08d	55-67	1506.09c	57-15	1703.06	58-11	1802.06
54-61	1407.01	55-68	1506.09d	57-16	1704.02a	58-12	1802.07
54-62	1407.02	55-69	1506.09e	57-17	1704.02b	58-13	1802.07b-1
54-63	1408.01a	55-70	1506.09f	57-18	1704.02c	58-14	1802.07c
54-64	1408.01b	55-71	1506.10a	57-19	1704.02d	58-15	1802.07d
54-65	1408.01c	55-72	1506.10b	57-20	1704.02e	58-16	1802.08
54-66	1408.02	55-73	1506.10c	57-21	1704.02f	58-17	1820.09a
54-67	1408.04	55-74	1506.11a	57-22	1704.01	58-18	1820.09b
54-68	1408.05	55-75	1506.11b	57-23	1704.03a	58-20	1803.01
54-69	1409.01	55-76	1506.13a	57-24	1704.03b	58-21	1803.02
54-70	—	55-77	1506.13b	57-25	1704.04	58-22	1803.03a
54-71	1410.01	55-78	1506.13b	57-26	1704.05	58-23	1803.03b
54-72	1410.02	55-79	1506.13c	57-27	1704.06	58-24	1803.03c
		55-80	1507.01	57-28	1704.07	58-25	1803.03d
55-1	1501.06	55-81	1507.02	57-29	1705.01	58-26	1803.03e
55-2	1501.02	55-82	1507.03	57-30	1705.02	58-27	1803.04b
55-3	1501.05	55-83	1507.04	57-31	1706.01a	58-28	1803.04a
55-4	1501.07	55-84	1508.01a	57-32	1706.01b	58-29	1803.04c-1
55-5	1502.01	55-85	1508.01b	57-33	1706.02a	58-30	1803.04c-2
55-6	1502.02	55-86	1508.02	57-34	1706.02b	58-31	1803.04d
55-7	1503.01	55-87	1508.03	57-35	1706.02c	58-32	1803.04e
55-8	1503.02	55-88	1508.04	57-36	1706.02d	58-33	1803.05
55-9	1503.03	55-89	1508.05	57-37	1706.03a	58-34	1803.06a
55-10	1501.03	55-90	1509.01	57-38	1706.03b	58-35	1803.06b
55-11	1501.04	55-91	1509.02	57-39	1706.03c	58-36	1804.01
55-12	1503.04	55-92	1509.03	57-40	1706.03d	58-37	1804.02
55-13	1503.05	55-93	—	57-41	1706.03e	58-38	1804.03
55-14	1503.06	55-94	—	57-42	1706.04	58-39	1804.04
55-15	1504.01	55-95	1510.01	57-43	1706.05a	58-40	1804.05
55-16	1504.02a	55-96	1510.02	57-44	1706.05b	58-41	1804.06
55-17	1504.02b	56-1	1601.03	57-45	1706.07a-1	58-42	1805.01
55-18	1504.02d	56-2	1601.04	57-46	1706.07a-2	58-43	1805.02
55-19	1504.02e	56-3	1602.01	57-47	1706.07a-3	58-44	1805.03
55-20	1504.02f	56-4	1603.01	57-48	1706.07a-4	58-45	1805.04
55-21	1504.04	56-5	1603.02	57-49	1706.07b	58-46	1805.05
55-22	1504.04	56-6	1603.03	57-50	1706.07c	58-47	1806.01
55-23	1504.05	56-7	1601.02	57-51	1706.07d	58-48	1806.02
55-24	1505.01	56-8	1603.01a	57-52	1706.09a	58-49	1806.03
55-25	1505.02	56-9	1603.01b	57-53	1706.09b	58-50	1806.04a
55-26	1503.03	56-10	1603.02a	57-54	1706.09c	58-51	1806.04b
55-27	1506.04	56-11	1604.02b	57-55	1706.08	58-52	1806.04c
55-28	1506.02a	56-12	1601.02c	57-56	1706.10	58-53	1806.04d
55-29	1506.02b	56-13	1603.02d	57-57	1706.11	58-54	1806.05a
55-30	1506.02c	56-14	1603.02e	57-58	1706.06	58-55	1806.05b
55-31	1506.02d	56-15	1603.02f&g	57-59	1707.01	58-56	1806.05c
55-32	1506.02e	56-16	1604.02h	57-60	1707.02a	58-57	1806.05d
55-33	1506.12	56-17	1605.01	57-61	1707.02b	58-58	1806.05e
55-34	1506.03a	56-18	1605.02	57-62	1707.02c	58-59	1807.01
55-35	1506.03b	56-19	1606.01	57-63	1707.02d	58-60	1807.03
55-36	1506.03c-1	56-20	1606.02	57-64	1707.02e	58-61	1807.04
55-37	1506.03c-2	56-21	1606.03	57-65	1707.03	58-62	1807.05
55-38	1506.03c-3	56-22	1606.04a	57-66	1707.04	58-63	1808.01
55-39	1506.03c-4	56-23	1606.04b	57-67	1707.05		
55-40	1506.03c-5	56-24	1606.04c	57-68	1708.01a		

NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL
58-64	1808.02a	61-43	2106.02b	64-3	2601.01c	65-4	2701.03b
58-65	1808.02b	61-44	2106.02c	64-4	2601.01d	65-5	2701.03c
58-66	1809.01	61-45	2106.02d	64-5	2601.01d	65-6	2702.05
58-67	1809.02	61-46	2106.03	64-6	2601.01e	65-7	2702.01
58-68	1809.03a	61-47	2106.04	64-7	2601.03	65-8	2702.02
58-69	1809.03b	61-48	2106.05	64-8	2601.04	65-9	2702.03
58-70	1809.04	61-49	2106.06	64-9	2601.05	65-10	2702.04a
58-71	1809.05	61-50	2106.07	64-10	2601.06	65-11	2702.04b
58-72	1809.06	61-51	2106.08	64-11	2601.07	65-12	2702.04c
58-73	1810.01	61-52	2107.01	64-12	2601.08	65-13	2702.04d
58-74	1810.02	61-53	2107.03	64-13	2601.09	65-14	2702.04e
58-75	1810.03	61-54	2107.04	64-14	2601.10	65-15	2702.04f
58-76	1810.04	61-55	2108.01	64-15	2601.02a&b	65-16	2702.04g
58-77	1810.05	61-56	2108.02	64-16	2601.02c-1	65-17	2702.04h
58-78	1810.06	61-57	2109.01	64-17	2601.02c-2	65-18	2702.04i
58-79	1811.01	61-58	2109.02	64-18	2601.02c-3	65-19	2702.04j
58-80	1811.02	61-59	2109.03	64-19	2601.02c-4	65-20	2702.04k
58-81	1811.03	61-60	2110.01a	64-20	2601.02c-5	65-21	2703.01
58-82	1812.01	61-61	2110.01b	64-21	2601.02c-6	65-22	2703.02
58-82	1812.02	61-62	2110.01c	64-22	2601.02d	65-23	2703.03
58-83	1812.04	61-63	2110.01d	64-23	2601.02e	65-24	2703.04
58-84	1812.05	61-64	2110.01e	64-24	2602.01a-1	65-25	2703.05a
58-85	1812.06	61-65	2110.01f	64-25	2602.01a-2	65-26	2703.05b
58-86	1813.01	61-66	2110.02	64-26	2602.01b-1	65-27	2703.05c
58-87	1813.02a	61-67	2110.03a	64-27	2602.01b-2	65-28	2703.05d
58-88	1813.02b	61-68	2210.03b-1	64-28	2602.01b-3	65-29	2703.05e
58-89	1813.02c	61-69	2110.03b-2	64-29	2602.01b-4		
58-90	1813.02d	61-70	2110.03b-3	64-30	2602.01c	66-1	3001.01
		61-71	2110.03c	64-31	2602.02a	66-2	3001.02
59-1	1901.01	61-72	2110.03d	64-32	2602.02b	66-3	3001.03
		61-73	2111.01a	64-33	2602.02c	66-4	3001.04
60-1	2001.01	61-74	2111.01b	64-34	2602.02d	66-5	3001.05a
60-2	2001.02a	61-75	2111.01c	64-35	2602.02e	66-6	3001.05b
60-3	2001.02b	61-76	2111.01d	64-36	2602.02f	66-7	3001.05c
60-4	2001.03	61-77	2111.01e	64-37	2602.02g	66-8	3001.05d
60-5	2002.01	61-78	2112.01	64-38	2602.02h	66-9	3001.05e
		61-79	2112.02a	64-39	2602.02i	66-10	3001.06a
61-1	2101.02a	61-80	2112.02b	64-40	2602.02j	66-11	3001.06b
61-2	2101.02b	61-81	2112.02c	64-41	2602.02b	66-12	3001.06c
61-3	2101.02c	61-82	2112.02d	64-42	2602.04c	66-13	3001.06d
61-4	2101.02d	61-83	2112.02e	64-43	2602.04d	66-14	3001.06e
61-5	2101.03	61-84	2113.01	64-44	2602.04e	66-15	3001.07a
61-6	2101.04	61-85	2113.02	64-45	2602.04f	66-16	3001.07b
61-6	2101.09a	61-86	2113.03	64-46	2602.04g	66-17	3001.07c
61-7	2101.05	61-87	2114.01a	64-47	2602.04h	66-18	3001.08
61-8	2101.06	61-88	2114.01b	64-48	2602.04j		
61-9	2101.07	61-89	2114.02	64-49	2602.04k	67-1	3101.01
61-10	2101.08	61-90	2115.01a	64-50	2602.04l	67-2	3101.02
61-11	2101.09b	61-91	2115.01b	64-51	2602.04m	67-3	3101.03
61-12	304.03	61-92	2116.01a	64-52	2603.01	67-4	3102.01
61-12	2101.10	61-93	2116.01b	64-53	2603.02a	67-5	3102.01c
61-13	2101.12a	61-94	2116.01c	64-54	2603.02b	67-6	3102.02a
61-14	2101.12b	61-95	2117.01	64-55	2603.02c	67-7	3102.02b
61-15	2101.12c	61-96	—	64-56	2603.02d	67-8	3102.03a
61-16	2101.12d	61-97	2117.02a	64-57	2603.02e	67-9	3102.03b
61-17	2102.01	61-98	2117.02b	64-58	2604.01	67-10	3102.03c
61-18	2102.02a	61-99	2117.02c	64-59	2605.01	67-11	3102.03d
61-19	2102.02b	61-100	2117.02d	64-60	2605.02	67-12	3102.04a
61-20	2102.02c	61-101	2118.01a	64-61	2605.03a	67-13	3102.04b
61-21	2103.01a	61-102	2118.01b	64-62	2605.03b	67-14	3102.04c
61-22	2103.01b			64-63	2605.03c	67-15	3102.05a
61-23	2103.01c	62-1	2401.01	64-64	2605.03d	67-16	3102.05b
61-24	2103.01d	62-2	2401.02a	64-65	2605.03e	67-17	3102.05c
61-25	2103.02a	62-3	2401.02b	64-66	2605.03f	67-18	3102.06
61-26	2103.02b	62-4	2401.03	64-67	2605.03g	67-19	3102.07
61-27	2103.02c	62-5	2401.04	64-68	2605.03h	67-20	3102.08
61-28	2103.02d	62-6	2402.01	64-69	2605.03i	67-21	3103.01
61-29	2103.02e	62-7	2402.02a	64-70	2605.03j	67-22	3103.01
61-30	2103.02f	62-8	2402.02b	64-71	2606.01a	67-23	3103.02a
61-31	2103.02g	62-9	2402.03	64-72	2606.01b	67-24	3103.02b
61-32	2103.02h			64-73	2606.01c	67-25	3103.03a
61-33	2103.02i	63-1	2501.01	64-74	2606.01d	67-26	3103.03b
61-34	2104.01	63-2	2501.02	64-75	2606.01e	67-27	3103.03c
61-35	2104.02a	63-3	2501.03	64-76	2606.01f	67-28	3103.03d
61-36	2104.02b	63-4	2501.04	64-77	2607.01a	67-29	3103.04a
61-37	2104.02c	63-5	2501.05	64-78	2607.01b	67-30	3103.01b
61-38	2104.03	63-6	2501.06	64-79	2607.01c	67-31	3103.04c
61-39	2105.01	63-7	2501.07			67-32	3103.05a
61-40	2105.02			65-1	2701.01	67-33	3103.05b
61-41	2106.01	64-1	2601.01a	65-2	2701.02	67-34	3103.05c
61-42	2106.02a	64-2	2601.01b	65-3	2701.03a	67-35	3103.06

NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL
67-36	3103.07	69-12	3302.03a&b	71-36	3504.01j	73-40	3804.07c
67-37	3103.08	69-13	3302.04	71-37	3504.01k	73-41	3804.07d
67-38	3104.01	69-14	3302.05	71-38	3501.01	73-42	3804.08
67-39	3104.02a	69-15	3302.06	71-39	3505.02a	73-43	3805.01a
67-40	3104.02b	69-16	3302.07	71-40	3505.02b	73-44	3805.01b
67-41	3104.03	69-17	3303.01a	71-41	3505.02c	73-45	3805.01c
67-42	3104.04	69-18	3303.01b	71-42	3505.03a	73-46	3801.05d
67-43	3104.05a	69-19	3303.02	71-43	3505.03b	73-47	3805.01e
67-44	3104.05b	69-20	3303.03	71-44	3505.03c	73-48	3805.02a
67-45	3104.05c	69-21	3303.04	71-45	3505.03d	73-49	3805.02b
67-46	3104.06	69-22	3303.05	71-46	3505.03e	73-50	3805.02c
67-47	3104.07	69-23	3303.06	71-47	3505.03f	73-51	3805.03
67-48	3104.08	69-24	3303.07	71-48	3506.01	73-52	3805.04
67-49	3105.01	69-25	3304.01	71-49	3506.02a	73-53	3805.05
67-50	3105.02	69-26	3305.01	71-50	3506.02b	73-54	3805.06
67-51	3105.03a	69-27	3306.01	71-51	3506.02c	73-55	3805.07
67-52	3105.03b	69-28	3306.02a	71-52	3506.02d	73-56	3805.08
67-53	3105.03c	69-29	3306.02b	71-53	3506.02e		
67-54	3104.04a	69-30	3307.01	71-54	3506.02f	74-1	3901.01a
67-55	3105.04b	69-31	3307.02	71-55	3506.03a	74-2	3901.01b
67-56	3105.04c			71-56	3506.03b	74-3	3902.01
67-57	3105.05	70-1	3401.01a	71-57	3506.03c	74-4	3902.02
67-58	3108.01	70-2	3401.01b	71-58	3507.01	74-5	3902.03a
67-59	3108.02a	70-3	3401.01c			74-6	3902.03b
67-60	3108.02b	70-4	3401.01cc	72-1	3601.01a	74-7	3902.04
67-61	3108.03a	70-5	3401.01d	72-2	3601.01b	74-8	3902.05
67-62	3108.03b	70-6	3401.02a&b	72-3	3601.02a	74-9	3902.06
67-63	3108.03c	70-7	3401.02c	72-4	3601.02b	74-10	3902.07a
67-64	3108.03d	70-8	3401.03	72-5	3601.02c&d&e	74-11	3902.07b
67-65	3108.03e	70-9	3461.04	72-6	3601.02f	74-12	3902.07c
67-66	3108.03f	70-10	3401.05	72-7	3601.03a	74-13	3902.07d
		70-11	3401.06a	72-8	3601.03b	74-14	3902.07e
68-1	3201.01	70-12	3401.06b	72-9	3601.03c	74-15	3902.08
68-2	3201.02	70-13	3401.06c	72-10	3601.03d	74-16	3902.09a
68-3	3201.03a	70-14	3401.06d	72-11	3601.03e	74-17	3902.09b
68-4	3201.03b	70-15	3401.06e	72-12	3601.03f	74-18	3902.09c
68-5	3201.03c	70-16	3401.06f	72-13	3601.03g	74-19	3902.09d
68-6	3201.03d	70-17	3401.07a	72-14	3601.04a	74-20	3902.09e
68-7	3201.03e	70-18	3401.07b	72-15	3601.04b	74-21	3902.09f
68-8	3201.03f	70-19	3402.02	72-16	3601.04c	74-22	3902.09g-1
68-9	3201.03g	70-20	3402.03a	72-17	3601.05	74-23	3902.09g-2
68-10	3201.03h	70-21	3402.03b			74-24	3902.09h
68-11	3201.03i	70-22	3403.02	73-1	3801.01	74-25	3902.10a
68-12	3201.03j	70-23	3403.03	73-2	3802.01a	74-26	3902.10b
68-13	3202.01a	70-24	3403.04	73-3	3802.01b	74-27	3902.11a
68-14	3202.01b			73-4	3802.02a&b	74-28	3902.11b
68-15	3202.01c	71-1	3501.01	73-5	3802.02c	74-29	3902.11c
68-16	3202.01d	71-2	3501.02	73-6	3802.03a	74-30	3902.11d
68-17	3202.01e	71-3	3501.03a&b	73-7	3802.03b		
68-18	3202.01f	71-4	3502.01	73-8	3802.03c	75-1	4001.01a
68-19	3202.02a	71-5	3502.02a	73-9	3802.03d	75-2	4001.01b
68-20	3202.02b	71-6	3502.02b	73-10	3802.04	75-3	4002.01
68-21	3202.02c	71-7	3502.02c	73-11	3802.05	75-4	4002.02a
68-22	3202.02d	71-8	3502.02d	73-12	3802.06	75-5	4002.02b
68-23	3202.02e	71-9	3502.03	73-13	3802.07	75-6	4002.02c
68-24	3202.02f	71-10	3503.01	73-14	3802.08a	75-7	4002.02d
68-25	3202.03a	71-11	3503.02a	73-15	3802.08b	75-8	4002.02e
68-26	3202.03b	71-12	3503.02b-1	73-16	3802.08c	75-9	4002.02f
68-27	3202.03c	71-13	3503.02b-2	73-17	3802.02d	75-10	4002.02g
68-28	3202.03d	71-14	3503.02b-3	73-18	3802.09	75-11	4003.01
68-29	3202.03e	71-15	3503.02c	73-19	3803.01	75-12	4003.02a
68-30	3202.04a	71-16	3503.02d	73-20	3803.02a	75-13	4003.02b
68-31	3202.04b	71-17	3503.02c-1	73-21	3803.02b	75-14	4003.02c
68-32	3202.05a	71-18	3503.02c-2	73-22	3803.02c	75-15	4003.02d
68-33	3202.05b	71-19	3503.02f	73-23	3803.03a	75-16	4003.02e
68-34	3202.05c	71-20	3503.02g	73-24	3803.03b	75-17	4003.03
68-35	3202.05d	71-21	3503.02h	73-25	3804.01a	75-18	4003.04
68-36	3202.05e	71-22	3503.02i	73-26	3804.01b	75-19	4004.01
68-37	3203.01	71-23	3503.02j	73-27	3804.01c		
		71-24	3503.02k	73-28	3804.02a	76-1	4101.01a
69-1	3301.01	71-25	3503.03a	73-29	3804.02b	76-2	4101.01b
69-2	3301.02	71-26	3503.03b	73-30	3804.02c	76-3	4101.01c
69-3	3301.03a	71-27	3504.01a	73-31	3804.02d&e	76-4	4101.02a
69-4	3301.03b	71-28	3504.01b	73-32	3804.03	76-5	4101.02b
69-5	3301.03c	71-29	3504.01c	73-33	3804.04	76-6	4101.02c
69-6	3301.03d	71-30	3504.01d	73-34	3804.05a	76-7	4101.02d
69-7	3301.03e	71-31	3504.01e	73-35	3804.05b	76-8	4102.01a
69-8	3301.03f	71-32	3504.01f	73-36	3804.05c	76-9	4102.01b
69-9	3301.03g	71-33	3504.01g	73-37	3804.06	76-10	4102.02
69-10	3302.01	71-34	3504.01h	73-38	3804.07a	76-11	4102.03
69-11	3302.02	71-35	3504.01i	73-39	3804.07b	76-12	4102.04a&b

NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL
76-13	4102.05a	79-39	4403.02c	79-120	4405.01	80-12	4603.03
76-14	4102.05b	79-40	4403.03a	79-121	4405.02	80-13	4603.04
76-15	4102.05c	79-41	4403.03a-1	79-122	4405.03a	80-14	4605.01
76-16	4102.05d	79-42	4403.03a-2	79-123	4405.03b	80-15	4605.01a
76-17	4102.06a	79-43	4403.03b	79-124	4405.03c	80-16	4605.01b
76-18	4102.06b	79-44	4403.03c	79-125	4405.03d	80-17	4605.02
76-19	4102.06c	79-45	4403.03d	79-126	4405.03e	80-18	4605.03
76-20	4102.06d	79-46	4403.03e	79-127	4405.03f	80-19	4605.04
76-21	4102.06e	79-47	4403.04	79-128	4405.04a	80-20	4606.01
76-22	4102.06eae	79-48	4403.05a	79-129	4405.04b	80-21	4604.02
76-23	4102.06f	79-49	4403.05b	79-130	4405.04c	80-22	4606.03
76-24	4102.06g	79-50	4403.05c	79-131	4405.05a	80-23	4606.04
76-25	4102.06h	79-51	4403.05d	79-132	4405.05b	80-24	4607.01
76-26	4102.06i	79-52	4403.05e	79-133	4405.06	80-25	4608.01
76-27	4102.06j	79-53	4403.05f	79-134	4406.01	80-26	4609.01
76-28	4102.06k	79-54	4403.05g	79-135	4406.02	80-27	4609.02
		79-55	4403.05h	79-136	4406.03		
77-1	4201.01	79-56	4403.05i	79-137	4406.03a	81-1	4701.01a
77-2	4201.02a	79-57	4403.05j	79-138	4406.03b	81-2	201.24
77-3	4201.02b	79-58	4403.06	79-139	4406.03c	81-2	4701.01b&c
77-4	4201.03a	79-59	4403.07	79-140	4406.03d	81-3	4701.02
77-5	4201.03b	79-60	4403.08	79-141	4406.03e	81-4	4701.03
77-6	4201.03c	79-61	4403.09a	79-142	4406.04	81-5	4701.04
77-7	4203.01	79-62	4403.09b	79-143	4407.01	81-6	4702.01
77-8	4203.02	79-63	4403.09c	79-144	4407.02a	81-7	4702.02
77-9	4203.03	79-64	4403.09d	79-145	4407.02b	81-8	4702.03
77-10	4203.04	79-65	4403.09e	79-146	4407.02c	81-9	4702.04
		79-66	4403.09f	79-147	4407.02d	81-10	4702.05
78-1	4301.01a	79-67	4403.10a	79-148	4407.02e	81-11	4702.06
78-2	4301.01b	79-68	4403.10b	79-149	4407.03a	81-12	4702.07a&b
78-3	4301.01c	79-69	4403.10c	79-150	4407.03b	81-13	4702.08
78-4	4301.02a	79-70	4403.10d	79-151	4407.03c	81-14	4702.09
78-5	4301.02b	79-71	4403.10e	79-152	4407.03d	81-15	4703.01
78-6	4301.03	79-72	4403.10f	79-153	4408.01a	81-16	4703.02
78-7	4301.04	79-73	4403.10g	79-154	4408.01b	81-17	4703.03
78-8	4301.05	79-74	4403.11a	79-155	4408.01c	81-18	4703.04
78-9	4301.06a	79-75	4403.11b	79-156	4408.01d	81-19	4704.01
78-10	4301.06b	79-76	4403.11c	79-157	4408.01e	81-20	4704.02
78-11	4301.06c	79-77	4403.11d	79-158	4408.01f	81-21	4704.02
78-12	4301.06d	79-78	4403.11e	79-159	4408.01g	81-22	4704.03
78-13	4301.07a	79-79	4403.11f	79-160	4408.01h	81-23	4704.04
78-14	4301.07b	79-80	4403.12a	79-161	4408.01i	81-24	4704.05
		79-81	4403.12b	79-162	4408.04	81-25	4704.06
79-1	4401.01	79-82	4403.12c	79-163	4408.04a	81-26	4705.01
79-2	4401.02	79-83	4403.12d	79-164	4408.04b		
79-3	4410.01a	79-84	4403.13a	79-165	4408.04c	82-1	4801.01
79-4	4410.01b	79-85	4403.13b	79-166	4408.04d	82-1	201.23
79-5	4402.01	79-86	4403.13c	79-167	4408.04e	82-2	4801.02
79-6	4402.02	79-87	4403.13d	79-168	4408.05	82-3	4801.03
79-7	4402.03	79-88	4403.13e	79-169	4408.05a	82-4	4801.04
79-8	4402.04	79-89	4403.13e-1	79-170	4408.05b	82-5	4801.05
79-9	4402.05	79-90	4403.13e-2	79-171	4408.05b-1	82-6	4801.06a&b
79-10	4402.06	79-91	4403.13e-3	79-172	4408.05b-2	82-7	A4701.16
79-11	4402.07	79-92	4403.14	79-173	4408.05b-3	82-8	A4701.17
79-12	4402.08	79-93	4403.14a	79-174	4408.05c	82-9	4801.06c
79-13	4402.09	79-94	4403.14b	79-175	4408.07	82-10	4810.01
79-14	4402.10a	79-95	4403.14c	79-176	4408.07a	82-11	4812.01
79-15	4402.10b	79-96	4403.14d	79-177	4408.07b	82-12	4802.01
79-16	4402.10c	79-97	4403.15	79-178	4408.07c	82-13	4802.02
79-17	4402.10d	79-98	4403.15a	79-179	4408.07d	82-14	4802.03a&b
79-18	4402.10e	79-99	4403.15b	79-180	4408.06	82-15	4802.03c
79-19	4402.11a	79-100	4403.15c	79-181	4408.02	82-16	4802.04
79-20	4402.11b	79-101	4403.15d	79-182	4408.03	82-17	4802.05
79-21	4402.11c	79-102	4403.15e	79-183	4409.01	82-18	4802.06
79-22	4402.12a	79-103	4403.15f	79-184	4409.09a	82-19	4802.07
79-23	4402.12b	79-104	4403.15g	79-185	4409.01b	82-20	4803.01
79-24	4402.12c	79-105	4403.15h	79-186	4409.01c	82-21	4803.02
79-25	4402.13	79-106	4403.15i	79-187	4409.02	82-22	4803.03a
79-26	4402.13a	79-107	4403.15j	79-188	4410.01c	82-23	4803.03b
79-27	4402.13b	79-108	4403.15k			82-24	4803.03c
79-28	4402.13c	79-109	4403.15l	80-1	4601.01	82-25	4803.03d
79-29	4402.13d	79-110	4403.16	80-2	4601.02	82-26	4803.03e
79-30	4402.14	79-111	4403.17	80-3	4601.03	82-27	4803.03f
79-31	4402.14a	79-112	4403.17a	80-4	4604.01	82-28	4803.03g
79-32	4402.14b	79-113	4403.17b	80-5	4602.02a	82-29	4803.03h
79-33	4402.15	79-114	4403.17c	80-6	4602.02b	82-30	4803.03i
79-34	4402.16	79-115	4403.17d	80-7	4602.02c	82-31	4803.03j
79-35	4402.17	79-116	4403.17d-1	80-8	1108.26	82-32	4803.03k
79-36	4403.01	79-117	4403.17d-2	80-9	4602.03	82-33	4803.04
79-37	4403.02a	79-118	4403.18	80-10	4603.01	82-34	4803.05
79-38	4403.02b	79-119	4404.01	80-11	4603.02	82-35	4803.06a

NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL	NEW	ORIGINAL
82-36	4803.06b	82-116	4808.06	83-41	4901.41	85-36	5303.05a
82-37	4803.06c	82-117	4808.07	83-42	4901.42	85-37	5303.05b
82-38	4803.07	82-118	4808.08	83-43	4901.43	85-38	5303.05c
82-39	4803.08a	82-119	4808.09	83-44	4901.44	85-39	5303.05d
82-40	4803.08b	82-120	4808.10	83-45	4901.45	85-40	5303.05e
82-41	4803.09	48-121	4808.11	83-46	4901.46	85-41	5303.05f
82-42	4803.10	48-122	4808.12	83-47	4901.47	85-41	5303.05g
82-43	4804.01a	48-123	4808.13	83-48	4901.49	85-42	5303.05h
82-44	4804.01b	48-124	4808.14	83-49	4901.50	85-43	5303.06a
82-45	4804.01c	48-125	4808.15	83-50	4901.51	85-44	5303.06b
82-46	4804.02	48-126	4808.16	83-51	4901.52	85-45	5303.06b-1
82-47	4804.03	48-127	4808.17	83-52	4901.53	85-46	5303.06c
82-48	4804.04a	48-128	4808.18	83-53	4901.54	85-47	5303.06c
82-49	4804.04b	48-129	4809.01	83-54	4901.55	85-48	5303.06d
82-50	4804.05	48-130	4809.02	83-55	4901.56	85-49	5303.06e
82-51	4804.06a	48-131	4809.03	83-56	4901.57	85-50	5303.06e
82-52	4804.06b	48-132	4809.04	83-57	4901.58	85-51	5304.01
82-53	4804.06c	48-133	4809.05	83-58	4901.59a	85-52	5304.02
82-54	4804.06d	48-134	4809.06	83-58	4901.59b&c	85-53	5304.03
82-55	4804.07a	48-135	4809.07	83-59	4901.59d	85-51	5304.01
82-56	4804.07b	48-136	4809.08	83-60	4901.60	85-55	5304.04
82-57	4804.07c	48-137	4809.09	83-61	4901.61	85-56	5304.04
82-58	4804.08	82-138	4809.10	83-62	4902.62	85-57	5304.01
82-59	4804.09	82-139	4809.11	83-63	4901.63	85-58	5304.05
82-60	4804.10	82-140	4809.12	83-64	4901.64	85-59	5304.06a
82-61	4805.01a	82-141	4809.13	83-65	4901.65	85-60	5304.06a
82-62	4805.01b	82-142	4809.14	83-66	4901.66	85-61	5304.06b
82-63	4805.02a	82-143	4809.15a	83-67	4901.67	85-62	5304.06c
82-64	4805.02b	82-144	4809.15b	83-68	4901.68	85-63	5304.06d
82-65	4805.02c	82-145	4809.15c	83-69	4901.69	85-64	5304.06e
82-66	4805.03	82-146	4809.15d	83-70	4901.70	85-65	5304.06f
82-67	4805.04	82-147	4809.15e			85-66	5304.06g
82-68	4805.05	82-148	4811.01a	84-1	5101.01a	85-67	5304.06h
82-69	4806.01	82-149	4811.01b	84-1	5201.01	85-68	5304.06i
82-70	4806.02	82-150	4811.01c	84-2	5201.02	85-69	5304.06j
82-71	4806.03	82-151	4811.01d	84-3	5202.01	85-70	5304.06k
82-72	4806.04a	82-152	4811.01e	84-4	5203.01	85-71	5102.01b
82-73	4806.04b	82-153	4802.08	84-5	5102.01	85-72	5305.01a
82-74	4806.05			84-5	5102.01a	85-73	5305.01b
82-75	4806.06	83-1	4901.01	84-6	5102.02a	85-74	5102.04
82-76	4806.07	83-2	4901.02	84-7	5102.02b	85-75	5101.04
82-77	4806.08a	83-3	4901.03	84-8	5101.04	85-75	5102.01a
82-78	4806.08b	83-4	4901.04	84-9	5102.05	85-76	5102.04
82-79	4806.09	83-5	4901.05	84-10	5102.03	85-77	5102.05
82-80	4806.10	83-6	4901.06			85-78	5102.03
82-81	4806.11	83-7	4901.07	85-1	5101.01a		
82-82	4806.12	83-8	4901.08	85-2	5301.01	86-1	201.22
82-83	4806.13	83-9	4901.09	85-3	5306.01	89-1	5401.01
82-84	4806.14	83-10	4901.10	85-4	5303.07	89-1	5402.01
82-85	4806.15	83-11	4901.11	85-5	5305.02	89-2	5401.02
82-86	4806.16	83-12	4901.11b	85-6	5305.03	89-3	5402.02
82-87	4806.17	83-13	4901.12	85-7	5302.01	89-4	5402.03
82-88	4806.18	83-14	4901.13	85-8	5302.02		
82-89	4806.19	83-15	4901.14	85-9	5303.01a		
82-90	4806.20	83-16	4901.15	85-10	5303.01b		
82-91	4806.21	83-17	4901.16	85-11	5303.01c	90-27	1103.10a
82-92	4806.22	83-18	4901.17	85-12	5303.01d		
82-93	4806.23	83-19	4901.19	85-13	5303.01e	92-4	404.15
82-94	4806.24	83-20	4901.20	85-14	5303.01f		
82-95	4807.01	83-21	4901.21	85-15	5303.02a	121-8	1103.04b
82-96	4807.02	83-22	4901.18	85-16	5303.02b		
82-97	4807.03	83-22	4901.22	85-17	5303.02c	125-16	1103.12b
82-98	4807.04	83-23	4901.23	85-18	5303.02d		
82-99	4807.05	83-24	4901.24	85-19	5303.02e	129-30	1108.19
82-100	4807.06	83-25	4901.25	85-20	5303.02f	129-31	401.18a
82-101	4807.07	83-26	4901.26	85-21	5303.02f	129-32	401.18b
82-102	4807.08	83-27	4901.27	85-22	5303.03	129-33	403.07
82-103	4807.09	83-28	4901.28	85-23	5303.03	129-34	403.07
82-104	4807.10	83-29	4901.29	85-24	5303.03	129-35	403.07
82-105	4807.11	83-30	4901.30	85-25	5303.03	129-36	403.07
82-106	4807.12	83-31	4901.31	85-26	5303.03	129-61	1103.15a
82-107	4807.13	83-32	4901.32	85-27	5303.04	129-62	1108.17a
82-108	4807.14	83-33	4901.33	85-28	5303.04	129-62	1103.15a
82-109	4807.15	83-34	4901.34	85-29	5303.04	129-65	1103.14a
82-110	4807.16	83-35	4901.35	85-30	5303.04	129-69	1103.03b
82-111	4808.01	83-36	4901.36	85-31	5303.04	129-71	1103.09a
82-112	4808.02	83-37	4901.37	85-32	5303.04		
82-113	4808.03	83-38	4901.38	85-33	5303.04		
82-114	4808.04	83-39	4901.39	85-34	5303.04	175-1	5103.01
82-115	4808.05	83-40	4901.40	85-35	5303.04	175-2	5103.01













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